

ABSTRACT OF THE DISCLOSURE

To provide a digital power amplifier having high power amplification efficiency.

The present invention relates to a digital power
5 amplifier in which a pair of first and second switching
elements inserted between a high potential power supply
line and a low potential power supply line is caused
to operate complementarily, and when switching the
switching element which has been switched on, dead time
10 is provided, to control power supply to a low-pass filter.
In a switching section, the first switching element,
a first coil, a second coil and the second switching
element are connected in series, between the high
potential power supply line and the low potential power
15 supply line. The switching section comprises a first
high-speed diode in which a cathode is connected to the
high potential power supply line, and an anode is
connected to a node between the second coil and the second
switching element, and a second high-speed diode in which
20 a cathode is connected to a node between the first
switching element and the first coil, and an anode is
connected to the low potential power supply line. The
node between the first coil and the second coil is
connected to the low-pass filter side.